



Home Tips®



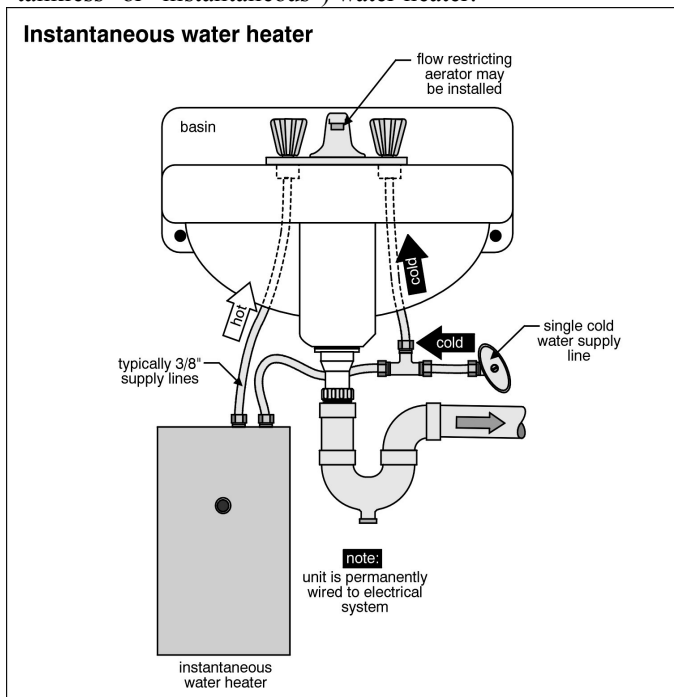
• CHRISTIAN BUILDING INSPECTORS, INC., 3697 HABERSHAM LANE, DULUTH, GEORGIA 30096, 770-849-0920 • AUGUST 2005 •

Q & A

Tankless Water Heaters?

We are building a new home and would like to know what is an option for a standard water heater?

Water heating accounts for 20% or more of an average household's annual energy expenditures. The yearly operating costs for conventional gas or electric storage tank water heaters average \$200 or \$450, respectively. One way to reduce this expenditure is to use a demand (also called "tankless" or "instantaneous") water heater.



Unlike "conventional" tank water heaters, tankless water heaters heat water only as it is used, or on demand. A tankless unit has a heating device that is activated by the flow of water when a hot water valve is opened. Once activated, the heater delivers a constant supply of hot water. The output of the heater, however, limits the rate of the heated water flow.

Gas and Electric Demand Water Heaters

Demand water heaters are available in propane (LP), natural gas, or electric models. They come in a variety of sizes for different applications, such as a whole-house water heater, a hot water source for a remote bathroom or hot tub, or as a boiler to provide hot water for a home heating system. They can also be used as a booster for dishwashers, washing

machines, and a solar or wood-fired domestic hot water system.

Cost

Demand water heaters cost more than conventional storage tank-type units. Small point-of-use heaters that deliver 1 gallon (3.8 liters) to 2 gallons (7.6 liters) per minute sell for about \$200. Larger gas-fired tankless units that deliver 3 gallons (11.4 liters) to 5 gallons (19 liters) per minute cost \$550-\$1,000.

Life Expectancy

Most tankless models have a life expectancy of more than 20 years. In contrast, storage tank water heaters last 10 to 15 years. Most tankless models have easily replaceable parts that can extend their life by many years more.

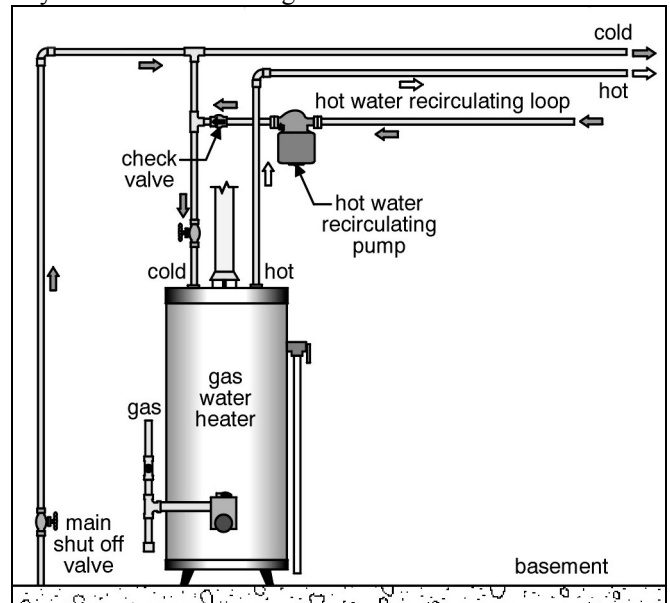
Source: U.S. Department of Energy

<http://www.eere.energy.gov/consumerinfo/factsheets/bc1.html>

Hot Water Circulating Pump?

Each morning we turn on the hot water in our bathroom, then enjoy a cup of coffee while waiting on the hot water. Is there anything we can do?

One solution is to install a hot water recirculation pump that circulates the hot water through a loop in the hot water piping. The system consists of a small pump and a return line from your farthest fixture. The pump mounts near the bottom of your water heater along with a check valve.



We highly recommend insulating all of your hot water pipes. Also having a timer and/or a thermostat will use even less energy. The timer only allows the pump to turn on at certain times. So if you only need hot water in the morning, you could set the timer for 6am to 8am. Then the pump would

only recirculate the hot water during that time. The thermostat turns off the pump when the water in the pipes reaches a certain temperature. So once the water in the pipe is hot, the pump turns off. When the timer and thermostatic controls are installed together, in series, the circulator operates only at the preset clock times specified by the user and only when the temperature conditions of the thermostat are met.

Pumps are in the \$200.00 to \$400.00 range and then you must have the system installed. You can expect to spend between \$600.00 to \$800.00 for the entire system.

Harvard Study Shows...

Homeowners spent nearly a quarter of a trillion dollars on home improvements and remodeling in 2003, according to a



study released this January by the Joint Center for Housing Studies at Harvard University. Nearly 45 percent of those dollars paid for interior work such as kitchens and bath remodels and room additions. Another 28 percent funded interior and exterior replacement work: roofing, siding, windows, doors, as well as flooring and wall finishes. The rest went to repair and replacement of systems and equipment - electrical systems, plumbing and appliances - and site

improvements like driveways and retaining walls.

If you have a question, change of address, comment, home tip or would like to send *Home Tips* to your clients, send your letter to *Home Tips*, Christian Building Inspectors, Inc., 3697 Habersham Lane, Duluth, Georgia, 30096-6111. You can also E-Mail your questions to us at rodharrison@christianbuildinginspectors.com/.

Quote Of The Month

" LOOK AT A DAY WHEN YOU ARE SUPREMEY SATISFIED AT THE END. IT'S NOT A DAY WHEN YOU LOUNGE AROUND DOING NOTHING. IT'S WHEN YOU'VE HAD EVERYTHING TO DO, AND YOU'VE DONE IT."
MARGARET THATCHER

A Tip Of The Hat To:

Steve Bing
Richardson Real Estate Corp.
4853 Fowler Creek View
Suwanee, Georgia 30024



Thank You

• CHRISTIAN BUILDING INSPECTORS, INC. •

- Member: ASHI, GAHI, MAIA, ICC •
- ICC CODE CERTIFIED CABO ONE & TWO FAMILY DWELLING INSPECTOR NO. 1619 •
- Fully Insured With E&O, Liability and Worker's Compensation Insurance •
- Office: 1-888-257-0365 or 770-849-0920, Fax 770-849-0540, Cell 404-697-4129 •
- Web Page: www.christianbuildinginspectors.com Email: rodharrison@christianbuildinginspectors.com •



- Site
- Drainage
- Foundations
- Floor Slabs
- Crawl Spaces
- Basements
- Structural
- Interior
- Exterior
- Appliances
- Ventilation
- Electrical
- Plumbing
- Heating
- Air Conditioning
- Attic
- Roofing
- Radon
- New Homes
- Warranty
- Construction